

NEW ESTER COMPOUND, HIGH POLYMER COMPOUND, RESIST MATERIAL AND PATTERN-FORMING METHOD

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Abstract of JP2000336121

PROBLEM TO BE SOLVED: To provide a new ester compound easily decomposable with an acid, useful as a raw material for a polymer compound realizing the sensitivity, resolution and etching resistance highly exceeding those of conventional product and effective as a resist material.

SOLUTION: The objective compound is expressed by formula I (R1 is H, methyl, CH₂CO₂R₁₄ or the like; R2 is H, methyl or CO₂R₁₄; R3 is a 1-8C alkyl or a 6-20C aryl; R4 to R13 are each H, a univalent hydrocarbon group or the like; R14 is a 1-15C alkyl), e.g. the compound of formula II. The objective compound can be produced by carrying out the nucleophilic addition reaction to the carbonyl group of bicyclo[2.2.1]heptan-2-one and its derivative by Grignard reaction, etc., to obtain an endo-type alcohol, subjecting the endo-type alcohol to a substitution reaction with an acid accompanying the inversion of steric structure and further carrying out the procedure of an alkali hydrolysis to form an exo-type alcohol, etc.

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